October 2, 2012

Debra Sturdevant DEQ Water Quality Division 811 SW Sixth Avenue Portland, Oregon 97204

Re: Petition to Begin Rulemaking to Regulate Pesticide Use

Dear Ms. Sturdevant:

This letter pertains to the petition submitted to the Oregon Environmental Quality Commission (EQC) on August 9, 2012 by Northwest Environmental Advocates (NWEA). The petition requests that the Oregon Department of Environmental Quality (DEQ) initiate rulemaking to incorporate pesticide use regulations into Oregon's water quality standards rules. The petition also requests that DEQ revise the pesticide general permit and petition the state boards of agriculture and forestry to take actions.

The proposal is based in part on the scientific information and recommendations contained in six biological opinions prepared by the National Marine Fisheries Service (NMFS) following consultation under the Endangered Species Act on national pesticide registrations proposed by the Environmental Protection Agency. These six biological opinions are listed in the petition from NWEA. Five of the biological opinions address compounds used in Oregon.

NMFS supports efforts to reduce harmful effects of the subject insecticides, herbicides and fungicides on species of fish listed as threatened or endangered under the Endangered Species Act. The effects of these compounds are thoroughly documented in the subject biological opinions, and in many cases where concentrations are elevated include deaths or injuries among individuals of the ESA-listed species. The biological opinions concluded that use of some of the compounds in a manner which would result in elevated concentrations in receiving waters is likely to jeopardize the continued existence of ESA-listed species or adversely modify their critical habitat.



Currently used and formerly used pesticides have been detected in stormwater, waterways, and fish tissues in Oregon. Morace (2012) found 23 currently used fungicides, herbicides, insecticides and degradates in stormwater collected in Columbia River Basin waterways in Oregon. A USGS study conducted in the late 1990s examined tissues from 11 species of anadromous and resident fish collected throughout the Columbia River basin, and found a variety of legacy pesticides including DDT, chlordane, dieldrin, toxaphene and their breakdown products in the tissues taken from fish collected in some of the sampled locations (Hinck *et al.* 2004). Pesticide concentrations in the lower Clackamas River basin tributaries have been noted to exceed aquatic-life benchmarks (Carpenter *et al.* 2008).

The NMFS acknowledges developing efforts in Oregon to address occurrences of elevated concentrations of pesticides in aquatic systems. For example, DEQ is developing a Toxics Reduction Strategy, which places an emphasis on reducing toxics at the source, rather than managing them after they are released. Oregon's Water Quality Pesticide Plan is intended to prevent and/or reduce the frequency of occurrence and concentrations of high-risk pesticides in waters of the state through coordination of legal authorities and key stakeholders.

The NMFS encourages the EQC and the DEQ to review currently available scientific information on pesticide application rates and methods and consider whether modifications to State of Oregon rules and permits would be beneficial to the long-term survival and recovery of ESA-listed species of fish. NMFS would welcome the opportunity to collaborate in, or provide technical resources to, such a review if requested.

Thank you for the opportunity to review and comment on the subject petition. Please contact me at the above address or at 503.231.2155 if you would like to proceed with further discussions on this matter.

Sincerely,

Kim W. Kratz, Ph.D.

Director, Oregon State Habitat Office Habitat Conservation Division

## REFERENCES

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- Hinck, J. E., C. J. Schmitt, T. M. Bartish, N. D. Denslow, V. S. Blazer, P. J. Anderson, J. J. Coyle, G. M. Dethloff, and D. E. Tillitt. 2004. Biomonitoring of Environmental Status and Trends (BEST) Program: environmental contaminants and their effects on fish in the Columbia River basin. Scientific Investigations Report 2004-5154. US Department of the Interior, U.S. Geological Survey, Columbia Environmental Research Center, Columbia, Missouri.
- Morace, J. L. 2012. Reconnaissance of contaminants in selected wastewater-treatment-plant effluent and stormwater runoff entering the Columbia River, Columbia River basin, Washington and Oregon, 2008-10. U.S. Geological Survey Scientific Investigations Report 2012-5068.
- Sather, N. K. and C. W. May. 2008. Riparian buffer zones in the interior Columbia River basin: a review of best available science. Prepared for National Oceanic & Atmospheric Administration, National Marine Fisheries Service, Northwest Fisheries Science Center, Seattle, Washington. Battelle Memorial Institute, Pacific Northwest Division, Richland, Washington.